Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for processing hypersonic signals, comprising:

generating a signal; and

forming a plurality of ~~wavelets~~ individual transducer outputs of the signal at a plurality of phases,

the ~~wavelets~~ outputs having a common frequency and amplitude,

the individual transducer outputs generating ~~the~~ wavelets originating at a common origin with reference to a first axis, and

the plurality of phases being generated using electronic delays;

forming one or more focused hypersonic beams based on the wavelets;

receiving one or more reflected hypersonic signals;

detecting objects based on the reflected hypersonic signals;

learning a set of parameters for optimal focus on said objects;

generating the plurality of hypersonic wavelets based on a set of parameters that specify one or more neighborhoods for the hypersonic beams; and

transmitting audio information based on the parameters to one or more of the objects detected at locations corresponding to the ~~neighborhoods.~~ neighborhoods based on the learned set of parameters.

2. (Canceled)

3. (Previously Presented) The method of claim 1, further comprising:

synthesizing one or more hypersonic ping signals; and

emitting the hypersonic ping signals as the focused hypersonic beams.

4. (Original) The method of claim 3, further comprising:

encoding the hypersonic ping signals using one or more frequencies; and

directing each of the focused hypersonic beams in different directions, each of the focused hypersonic beams corresponding to one of the hypersonic ping signals.

5. (Previously Presented) The method of claim 1, further comprising:

setting a coordinate system for a space;

scanning the space based on the coordinate system; and

recording object parameters corresponding to detected objects.

6. (Previously Presented) The method of claim 5, the coordinate system is suitable for one, two or three dimensional space.

7. (Canceled)

8. (Original) The method of claim 6, further comprising:

selecting one or more carrier hypersonic frequencies based on the parameters;

generating one or more side bands, one side band corresponding to each of the carrier hypersonic frequencies, the side bands being encoded with audio information;

generating a plurality of output signals, each of the output signals corresponding to one of the side bands;

generating a plurality of sets of phase shifts;

generating a plurality of driving signals, each of the driving signals being a combination of the plurality of output signals, wherein each of the output signals is phase shifted by an appropriate phase shift of the set of phase shifts for that output signal; and

driving each of the hypersonic wavelets with one of the driving signals.

9. (Original) The method of claim 6, further comprising:

receiving environment information; and

setting the parameters based on the environment information.

10. (Currently Amended) A computer readable medium ~~or a modulated signal being encoded~~ to perform the method of claim 1.

11. (Previously Presented) An apparatus that processes hypersonic signals, comprising:

a memory;

a plurality of transducer elements formed into a transducer element array, the transducer elements all having a common position with reference to a first axis;

a driver that drives the transducer elements with a signal at a plurality of phases, the driver having a delay processor that forms the phases of the signal causing the transducer element array to form a focused hypersonic beam;

a detector that detects objects based on echo signals received by the transducer element array; ~~and~~

learning a set of parameters for optimal focus on said objects; and

a signal generator that generates an output signal to encode audio information for transmission to a chosen location~~.~~, based on the learned set of parameters.

12. (Canceled)

13. (Previously Presented) The apparatus of claim 11, the signal generator comprising:

a frequency selector that selects one or more frequencies based on transmission parameters;

a delay processor that determines a plurality of delays corresponding to the hypersonic transducer elements that is required to form a focused hypersonic beam directed at a specified direction; and

a signal generator that generates a signal that includes selected frequencies, the signal being delayed by a corresponding one of the plurality of delays before driving each of the hypersonic transducer elements through the driver.

14. (Original) The apparatus of claim 13, the frequency selector selecting the frequencies based on a noise environment, the frequencies being selected to form a code to enhance reception of echoes of the focused hypersonic beam from the objects.

15. (Previously Presented) The apparatus of claim 11, further comprising:

a controller that sets a coordinate system for a space, scans the space by directing the focused hypersonic beam to proceed based on the coordinate system, and records coordinates of detected objects based on echoes from the focused hypersonic beam.

16. (Original) The apparatus of claim 15, further comprising a signal generator that generates an output signal corresponding to each of the hypersonic transducer elements based on parameters stored in the memory, the controller specifying a neighborhood for the focused hypersonic beam based on one or more object locations and controlling the signal generator to generate the output signal to encode audio information for transmission to the neighborhood.

17. (Original) The apparatus of claim 16, wherein:

the signal generator generating the output signal to include a side band for encoding the audio information;

the delay processor generating a set of driving signals, each of the driving signals being the output signal delayed by one of a set of delays corresponding to phase shifts for each of the transducer elements to form the focused hypersonic beam; and

the driver driving one of the driving signals to each of the transducer elements to form the focused hypersonic beam.

18. (Original) The apparatus of claim 17, wherein the controller selects one or more carrier frequencies for transmission of a corresponding plurality of audio information, the signal generator generating a plurality of output signals and the delay processor generating a plurality of sets of delays, the delay processor delaying each of the output signals by a corresponding set of delays for one of the plurality of audio information, the delay processor combining all delayed output signals for each of the transducer elements and outputs combined output signal to the driver for driving each of the transducer elements.

19. (Original) The apparatus of claim 18, the hypersonic transducer transmitting a plurality of focused hypersonic beams, each of the focused hypersonic beams delivering one of the plurality of audio information to a unique neighborhood as based on the delays.

20. (Original) The apparatus of claim 18, the controller receiving environment information, and selecting carrier frequencies and amplitude of the output signals based on the environment information.

21. (Previously Presented) The apparatus of claim 11 further comprising:

means for scanning a space using a focused hypersonic beam;

means for detecting the objects based on echo signals of the focused hypersonic beam; and

means for delivering audio information to a neighborhood of detected objects.

22. (Original) The apparatus of claim 21, further comprising:

means for scanning the space using multiple focused hypersonic beams; and

means for delivering unique audio information to different neighborhoods using multiple hypersonic beams.

23. (Previously Presented) The method of claim 1 further comprising: receiving a hypersonic signal; and

delaying the hypersonic signal by a plurality of phases to select portions of information in the hypersonic signal.